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10/748,695	12/30/2003	Robert Coon	WEAT/0535	2005

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EXAMINER

COLLINS, GIOVANNA M

ART UNIT PAPER NUMBER

3672

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/748,695

Applicant(s)

COON ET AL.

Examiner

Giovanna M. Collins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-18 and 23-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-18 and 23-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/06/04, 10/26/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1, 8, 10 and 13 are objected to because of the following informalities:

Claim 1 recites in line 6 "the at least one port selectively alignable with the at least one flow port" It is unclear whether the applicant is referring to the "at least one flow port" recited in line 2, or the "at least one port" recited in line 5. It appears the applicant intended to recite in lines 5-6 - - the at least one sleeve flow port selectively alignable with the at least one tubular housing flow port - -.

Claim 8 recites the limitation "the sealing element" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 10, which depends from claim 1, recites in line 3 "the flow port". It is unclear whether the applicant is referring to the "at least one flow port" recited in line 2, of claim 1 or the "at least one port" recited in line 5 of claim 1. It appears the applicant intended to recite in line 3, - - the sleeve flow port- -.

Claim 13 recites "at least one of" in line 10. It is unclear what the applicant is trying to state.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1,8,12,13,23,26,27,30 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Grimmer et al. 3,051,143.

Referring to claims 1 and 26, Grimmer discloses (fig. 2) a tool for use in a wellbore comprising a tubular housing (22) having a bore and at least one flow port (at 44) disposed through a wall; a sleeve (70) slidable mounted in the housing, where the sleeve has a bore and the at least one flow port (77) alignable with the other flow port, a annular seal assembly (at 59) comprising an adapter (61) the length of the adapter is substantially larger as the length of the sleeve flow port.

Referring to claims 8, 23, Grimmer disclose the adapter (61) is a center adapter and the seal assembly first has a first end adapter (60 at top), a first chevron shaped sealing element (59 at top) in a first axial orientation, a second end adapter (60 at bottom) and a second chevron shaped sealing element (59 at bottom) in a second vertical orientation opposite the first orientation.

Referring to claim 12, Grimmer discloses the housing comprising an upper housing (at 30) and a lower housing (at 28) threadingly coupled together and one on the housings (30) has a lip and the other housing (28) has a tapered surface so the housings are coupled the lip mates with the tapered surface to form a seal.

Referring to claims 13 and 30, as best understood by the examiner, Grimmer discloses a seal assembly comprising a first end adapter (60), a second end adapter (60), a center adapter (61), and an annular seal assembly comprising a first chevron shaped sealing element (59) in a first axial orientation, and a second chevron shaped sealing element (59) in a second vertical orientation opposite the first orientation, the length of one of the adapters (at 53) is substantially the same or greater than the length of a sleeve flow port (at 77) of the tool.

Referring to claim 27, Grimmer discloses a method using the tool as recited in claim 1, comprising running the wellbore tool in to a pressure wellbore, sliding the sleeve (70) over the seal assembly (at 59) where the adapter (at 60,61) will limit the fluid flow across the seal assembly.

Referring to claim 34, Grimmer discloses a method comprising disposing the seal assembly of claim 13 in to a tool comprising a housing (22) and a sleeve (70), running the wellbore tool in to a pressure wellbore, sliding the sleeve (70) over the seal assembly (at 59) where the adapter (60,61) will limit the fluid flow across the seal assembly.

4. Claim 1,12,26 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Jackson 6,860,330.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome

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either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Referring to claims 1 and 26, Jackson discloses (fig. 1C-1D) a tool for use in a wellbore comprising a tubular housing (20) having a bore and at least one flow port (at 25) disposed through a wall; a sleeve (at 30) slidable mounted in the housing, where the sleeve has a bore and at least one flow port (35) that is alignable with the other flow port, a annular seal assembly (at 50) comprising an adapter (53) the length of the adapter is substantially the same as the length of the sleeve flow port.

Referring to claim 12, Jackson discloses the housing comprising an upper housing (see fig. 1a at 5) and a lower housing (tubular below element 5) threadingly coupled together and one on the housings (5) has a lip (at the end) and the other housing has a tapered surface so the housings are coupled the lip mates with the tapered surface to form a seal (see where element 5 mates with adjacent tubular).

Referring to claim 27, Jackson discloses a method using the tool as recited in claim 1, comprising running the wellbore tool in to a pressure wellbore (10), sliding the sleeve (30) over the seal assembly (50) where the adapter (53) will limit the fluid flow across the seal assembly.

5. Claim 1 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Bassinger 2,317,021.

Referring to claims 1 and 26, Bassinger discloses (fig. 1) a tool for use in a wellbore comprising a tubular housing (12) having a bore and at least one flow port (at 16) disposed through a wall; a sleeve (27) slidable mounted in the housing, where the sleeve has a bore and the at least one flow port (28) alignable with the other flow port, an annular seal assembly (at 29) comprising an adapter (24) the length of the adapter is substantially larger as the length of the sleeve flow port.

6. Claim 13,16,18,28,29,31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Tausch et al. 2,888,080.

Referring to claims 13, and 29-33, as best understood by the examiner, Tausch discloses a seal assembly comprising a first end adapter (above element 39), a second end adapter (below element 40), a center adapter (at 48), and an annular seal assembly comprising a first chevron shaped sealing element (39) in a first axial orientation, and a second chevron shaped sealing element (40) in a second vertical orientation opposite the first orientation, the length of one of the adapters (at 48) is substantially larger as the length of a sleeve flow port (at 58) of the tool and the length of one of the adapter is greater than the combined length of the rest of the seal assembly and the length of the adapters is greater than the combined length of the rest of the seal assembly.

Referring to claims 16-18 and 28, Tausch the adapters (adapter above element 39, 48 and adapter below element 40) are made of metal which is a hard material, and the sealing elements are made of an elastomer (39,40) which a soft material.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray 5,316,084 in view of Bassinger 2,317,021.

Murray discloses (fig. 2) a tool for use in a wellbore comprising a tubular housing (119) having a bore and at least one flow port (106) disposed through a wall; a sleeve (111) slidable mounted in the housing, where the sleeve has a bore and the at least one flow port (116) alignable with the other flow port, a annular seal assembly (at fig. 8) comprising an adapter (at 209). Murray does not disclose the length of the adapter is substantially larger as the length of the sleeve flow port. Bassinger teaches a sealing element where the adapter (at 24) is substantially larger as the length of the sleeve flow port. The adapter helps to blow the full pressure in the port from the seals (page 2, col. 2, lines 1-13). As it would be advantageous to help prevent the seals from having the full force of pressure at the ports, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the tool disclosed by Murray to have the adapter the same or greater than the length of the flow port in view of the teachings of Bassinger.

Referring to claim 10, Murray discloses equalization ports (at bottom of port 116) that are smaller than the sleeve flow port (at 1116).

Referring to claim 11, Murray discloses means (111a,b and 119a,b,c) for selectively retaining the sleeve in a closed, open and equalization position.

8. Claims 5-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimmer '243 in view of Baugh '547.

Referring to claims 5-7,14,15, Grimmer does not disclose protrusions on the center adapter. Baugh teaches a plurality of protrusions around and inner and outer side of a center adapter. Baugh teaches the protrusions help to reduce tearing and abrading the adapter as it is installed (col. 6, lines 17-26). As it would be advantageous to prevent tearing the adapter, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the tool disclosed by Grimmer to have the center adapter have protrusions in view of the teachings of Baugh.

Referring to claim 9, Grimmer does not disclose protrusions on the first end adapter. Baugh teaches a protrusion on an adapter. Baugh teaches the protrusion provides backup sealing (col. 5, lines 38-40). As it would be advantageous to have backup sealing it would be obvious to one of ordinary skill in the art at the time of the invention to modify the tool disclosed by Grimmer to have the center adapter have protrusions in view of the teachings of Baugh.

9. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bassinger 2,317,021 in view of Grimmer '243

Bassinger does not disclose equalization ports (at bottom of port 116) that are smaller than the sleeve flow port (at 116). Grimmer teaches equalization ports (77) that are smaller than a flow port (at 75). Grimmer teaches the equalization ports so the pressure differential inside the tubing can equalize slowly (col. 5, lines 10-15). As it would be advantageous to allow the pressure inside the tubular to equalize slowly to prevent damage, it would be obvious to one of ordinary skill in the art to modify the tool disclosed by Bassinger to have equalization ports as taught by Grimmer.

Referring to claim 11, Grimmer teaches means (at 92, 91 and 88) for selectively retaining the sleeve in a closed, open and equalization position.

10. Claims 24 is are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimmer '243 in view of Murray et al. 5,316,084.

Grimmer discloses a first chevron shaped sealing element (59 at top) but does not disclose the sealing element is made from an elastomer or the adapter is made from a thermoplastic or metal. Murray teaches that it is well known in the art to have a seal stack have an adapter made of metal and a sealing element made of an elastomer (col. , lines 51-56). Therefore it would be obvious to modify the tool disclosed by Grimmer to have the adapter made of metal and the sealing element made of an elastomer in view of the teachings of Murray because it is well known in the art.

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Response to Arguments

11. Applicant's arguments with respect to claims 1,5-18, and 23-34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 571-272-7027. The examiner can normally be reached on 6:30-3 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


gmc


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